

February 27, 2007



U.S. Department  
of Transportation

400 Seventh Street, S.W.  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 11667  
(SEVENTH REVISION)

EXPIRATION DATE: January 31, 2011

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Weldship Corporation  
Bethlehem, PA
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the transportation in commerce of certain Class 2 gases in DOT Specification 3AA, 3AAX and 3T cylinders that have been retested by means other than the hydrostatic retest required in § 180.205. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
  - c. Party status will not be granted to this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.302a(b)(2), (3), and (4); § 180.205(c), (f), (g), (i); § 180.209: introductory paragraph and Table; in that an acoustic emission test is performed in place of the hydrostatic test and the internal visual inspection.
5. BASIS: This special permit is based on the application of Weldship Corporation dated February 9, 2007, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Liquefied or nonliquefied compressed gases, or mixtures of such compressed gases, classed as Division 2.1, Division 2.2, or Division 2.3 which are authorized for transportation in DOT Specification 3AA, 3AAX and 3T cylinders.	As Appropriate	As Appropriate	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are DOT Specification 3AA, 3AAX or 3T cylinders, mounted on a tube trailer vehicle chassis, a tube module equipped with an ISO frame, in cradles or in a disassembled position. The cylinder must have a minimum wall thickness of not less than 0.400 inch. In lieu of the hydrostatic test and internal visual inspection prescribed in § 180.205(c), each cylinder must be examined by acoustic emission test and, as required, by ultrasonic test. Each cylinder must be retested and marked in accordance with the procedures specified in the Weldship Corporation application for special permit on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA) and as prescribed in this special permit.

b. TESTING - The signal processor threshold level must be set at not greater than 32 dB. Each acoustic emission (AE) site on the cylindrical portion of each tube which produces five or more valid events within an 8-inch axial distance must be subjected to an ultrasonic inspection. Each AE site on tube ends (i.e. sections of the tube which lie outboard of the sensors) which produces five or more events which hit both sensors and which had 43dB or greater peak amplitude at the "first hit" sensor, must be subjected to an ultrasonic inspection. Recording of AE data must start when tube pressure reaches the lesser of 1,000 psig or 60 percent of

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normal fill pressure, and end when cylinder pressure reaches the greater of 110 percent of either the marked service pressure or allowable fill pressure.

c. PERSONNEL QUALIFICATIONS - Each person who performs retesting in accordance with the acoustic emission and ultrasonic test procedures authorized by this special permit must be a "qualified tester". The term "qualified tester" used in this special permit means a person who meets either paragraph 7.c.(1) or 7.c.(2) of this special permit.

(1) A person who holds an engineering degree from an accredited college or university and has at least:

(i) Five (5) years continuous experience in: (A) the design, fabrication, maintenance, testing and inspection of DOT Specification cylinders or of pressure vessels; (B) metallurgy; or (C) non-destructive testing of pressure vessels, or any combination thereof; and

(ii) Fifty (50) hours of experience in AE testing of pressure vessels or DOT Specification cylinders; and

(iii) 20 hours of experience in ultrasonic testing in accordance with the method specified in ASTM A-388-67.

(2) A person who performs such testing under the general supervision of one qualified under paragraph c (1) above (whether or not at the same location). Such person must have:

(i) (A) at least 5 years continuous experience of a technical nature involving DOT Specification cylinders or pressure vessels; or (B) successfully completed at least 10 semester hours of a scientific or technical curriculum and has at least 2 years continuous experience of the same technical nature; and (ii) received at least (A) 40 hours of training or instruction in AE testing of pressure vessels or DOT Specification cylinders and must have at least 80 hours of experience in such testing under the personal supervision of a person qualified under paragraph c (1) above; (B) 40 hours of training or instruction in ultrasonic testing; and (C) 10 additional hours of experience

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in such testing under the direct, personal supervision of a person qualified under paragraph c.(1) above.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. Cylinders retested in accordance with paragraph 7 above may be charged to 110 percent of marked service pressure in accordance with § 173.302a(b).

d. A statement of qualifications, for each "qualified tester" used under this special permit and information in support thereof, shall be maintained by Weldship. The location of this statement, for each "qualified tester", must be identified to the OHMSPA.

e. Transportation of Division 2.1 (flammable gases) and Division 2.3 (gases which are poisonous by inhalation) are not authorized aboard cargo vessel unless specifically authorized in the Hazardous Materials Table (§ 172.101).

f. Transportation of oxygen is only authorized when in accordance with § 172.102(c)(2) Special Provision A52 and §§ 175.85(h) and (i).

g. MARKING -

(1) The exterior of the trailer cabinet of the vehicle chassis to which the cylinders are affixed must be marked with letters at least 2 inches high on a contrasting background "DOT-SP 11667".

(2) An exterior tube on each side of a tube module must be marked with letters at least 2 inches high on a contrasting background "DOT-SP 11667".

(3) The current retest date must be marked on the rear

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bulkhead inside the trailer cabinet at approximately eye level above the withdrawal valve for tube trailers and on the bulkhead near the withdrawal valve for tube modules. In the event retest dates of cylinders differ in a trailer cluster, the retest date displayed will be that of the oldest retest date, meaning the date of the retest that must occur first.

(4) Each DOT Specification 3AA cylinder that is in a cradles must be marked in letters at least 2 inches high on a contrasting background "DOT-SP 11667" and with the retest date.

- h. Packagings permanently marked 'DOT-E 11667', prior to October 1, 2007 may continue to be used under this special permit for the remaining service life of the packaging or until the special permit is no longer valid. Packagings marked on or after October 1, 2007 must be marked 'DOT-SP 11667'.
- i. Shipping papers displaying 'DOT-E 11667' may continue to be used until October 1, 2007, provided the special permit remains valid.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by § 107.601 et seq., when applicable.

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Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term 'exemption' to 'special permit' and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

## 12. REPORTING REQUIREMENTS:

The following information must be reported to OHMSPA:

- a. The name of each person qualified to conduct testing under Paragraph 7.c., before use as a "qualified tester".
- b. Location of each facility where testing under this special permit is conducted.
- c. A report on the first test and a report each 6 months thereafter indicating the number of cylinders tested under this special permit and identification by serial number of those passing and those failing to pass the test authorized by this special permit. Specifically, each report must include at least the following information:
  - (1) DOT Specification number.
  - (2) Maximum allowable filling pressure.
  - (3) Minimum prescribed sidewall.
  - (4) Number of events at each location.
  - (5) Pressure associated with each event.
  - (6) Description of each AE event (amplitude, duration, energy, etc.)
  - (7) Size of each defect measured (length and depth).
  - (8) Type of each defect measured (crack, pitting, etc.).
  - (9) Defect location relative to each sensor.

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(10) Defect location relative to sidewall (interior, outer surface, inner surface).

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Bob Richard  
Deputy Associate Administrator  
for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm) Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.  
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